Query the list of CITY names from **STATION** which have vowels (i.e., a, e, i, o, and u) as both their first and last characters. Your result cannot contain duplicates.

Input Format

The **STATION** table is described as follows:

STATION

Field	Type
ID	NUMBER
CITY	VARCHAR2(21)
STATE	VARCHAR2(2)
LAT_N	NUMBER
LONG_W	NUMBER

where LAT_N is the northern latitude and LONG_W is the western longitude.

DB2

```
1
2 ▾ /*
3       Enter your query here and follow these instructions:
4       1. Please append a semicolon ";" at the end of the query
    and enter your query in a single line to avoid error.
5       2. The AS keyword causes errors, so follow this
    convention: "Select t.Field From table1 t" instead of "select
    t.Field From table1 AS t"
6       3. Type your code immediately after comment. Don't leave
    any blank line.
7   */
8   SELECT DISTINCT CITY FROM STATION WHERE LOWER(SUBSTR(CITY, 1,
    1)) IN ('a', 'e', 'i', 'o', 'u') AND LOWER(SUBSTR(CITY,
    LENGTH(CITY), 1)) IN ('a', 'e', 'i', 'o', 'u');
9
```

Line: 8 Col: 131

Upload Code as File

Run Code | Submit Code

You have earned 15.00 points!

You are now 5 points away from the 2nd star for your sql badge.

95% 170/175

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
1 INPUT
```

Expected Output Download

```
1 Acme
2 Aguanga
3 Alba
4 Aliso Viejo
5 Alpine
6 Amazonia
```

Query the difference between the maximum and minimum populations in **CITY**.

Input Format

The **CITY** table is described as follows:

CITY

Field	Type
ID	NUMBER
NAME	VARCHAR2(17)
COUNTRYCODE	VARCHAR2(3)
DISTRICT	VARCHAR2(20)
POPULATION	NUMBER

DB2

```
1
2 ▾ /*
3       Enter your query here and follow these instructions:
4       1. Please append a semicolon ";" at the end of the query
    and enter your query in a single line to avoid error.
5       2. The AS keyword causes errors, so follow this
    convention: "Select t.Field From table1 t" instead of "select
    t.Field From table1 AS t"
6       3. Type your code immediately after comment. Don't leave
    any blank line.
7   */
8   SELECT MAX(POPULATION) - MIN(POPULATION) FROM CITY;
```

Line: 8 Col: 52

Upload Code as File

Run Code | Submit Code

You have earned 10.00 points!

You are now 120 points away from the 3rd star for your sql badge.

4% 180/300

Sql

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
1
```

Expected Output Download

```
1   4695354
```

Consider $P_1(a, c)$ and $P_2(b, d)$ to be two points on a 2D plane where (a, b) are the respective minimum and maximum values of Northern Latitude (LAT_N) and (c, d) are the respective minimum and maximum values of Western Longitude (LONG_W) in **STATION**.

Query the Euclidean Distance between points P_1 and P_2 and format your answer to display **4** decimal digits.

Input Format

The **STATION** table is described as follows:

STATION

Field	Type
ID	NUMBER
CITY	VARCHAR2(21)
STATE	VARCHAR2(2)
LAT_N	NUMBER
LONG_W	NUMBER

where LAT_N is the northern latitude and LONG_W is the western longitude.

DB2

```
1
2 ▾ /*
3       Enter your query here and follow these instructions:
4       1. Please append a semicolon ";" at the end of the query
  and enter your query in a single line to avoid error.
5       2. The AS keyword causes errors, so follow this
  convention: "Select t.Field From table1 t" instead of "select
  t.Field From table1 AS t"
6       3. Type your code immediately after comment. Don't leave
  any blank line.
7   */
8   SELECT CAST(SQRT(POWER(MAX(LAT_N) - MIN(LAT_N), 2) +
    POWER(MAX(LONG_W) - MIN(LONG_W), 2)) AS DECIMAL(10,4)) FROM
    STATION;
9
```

Line: 8 Col: 106

Upload Code as File

Run Code | Submit Code

You have earned 30.00 points!

You are now 90 points away from the 3rd star for your sql badge.

28% 210/300

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
1 INPUT
```

Expected Output Download

```
1 184.1616
```

A median is defined as a number separating the higher half of a data set from the lower half. Query the median of the Northern Latitudes (LAT_N) from **STATION** and round your answer to **4** decimal places.

Input Format

The **STATION** table is described as follows:

STATION

Field	Type
ID	NUMBER
CITY	VARCHAR2(21)
STATE	VARCHAR2(2)
LAT_N	NUMBER
LONG_W	NUMBER

where LAT_N is the northern latitude and LONG_W is the western longitude.

MySQL

```
/*
Enter your query here.
*/
SET @r = 0;
SELECT ROUND(AVG(Lat_N), 4) FROM (SELECT (@r := @r + 1) AS r,
Lat_N FROM Station ORDER BY Lat_N) Temp WHERE r = (SELECT
CEIL(COUNT(*) / 2) FROM Station) OR r = (SELECT
FLOOR((COUNT(*) / 2) + 1) FROM Station)

```

Line: 5 Col: 157

Upload Code as File

Run Code Submit Code

You have earned 40.00 points!

You are now 50 points away from the 3rd star for your sql badge.

60% 250/300

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
INPUT
```

Expected Output Download

```
83.8913
```

Given the **CITY** and **COUNTRY** tables, query the names of all cities where the CONTINENT is 'Africa'.

Note: CITY.CountryCode and COUNTRY.Code are matching key columns.

Input Format

The **CITY** and **COUNTRY** tables are described as follows:

CITY

Field	Type
ID	NUMBER
NAME	VARCHAR2(17)
COUNTRYCODE	VARCHAR2(3)
DISTRICT	VARCHAR2(20)
POPULATION	NUMBER

COUNTRY

Field	Type
CODE	VARCHAR2(3)
NAME	VARCHAR2(44)
CONTINENT	VARCHAR2(13)
REGION	VARCHAR2(25)
SURFACEAREA	NUMBER
INDEPYEAR	VARCHAR2(5)
POPULATION	NUMBER
LIFEEXPECTANCY	VARCHAR2(4)
GNP	NUMBER
GNPOLD	VARCHAR2(9)
LOCALNAME	VARCHAR2(44)
GOVERNMENTFORM	VARCHAR2(44)
HEADOFSTATE	VARCHAR2(32)
CAPITAL	VARCHAR2(4)
CODE2	VARCHAR2(2)

MySQL

```
1  SELECT CITY.Name FROM CITY INNER JOIN COUNTRY ON
   CITY.CountryCode = Country.Code WHERE COUNTRY.Continent =
   'Africa';
```

Line: 1 Col: 117

Upload Code as File

Run Code | Submit Code

You have earned 10.00 points!

You are now 40 points away from the 3rd star for your sql badge.

68% 260/300

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
1
```

Expected Output Download

```
1 Qina
2 Warraq al-Arab
3 Kempton Park
4 Alberton
5 Klerksdorp
6 Uitenhage
```

Given the **CITY** and **COUNTRY** tables, query the names of all cities where the CONTINENT is 'Africa'.

Note: CITY.CountryCode and COUNTRY.Code are matching key columns.

Input Format

The **CITY** and **COUNTRY** tables are described as follows:

CITY

Field	Type
ID	NUMBER
NAME	VARCHAR2(17)
COUNTRYCODE	VARCHAR2(3)
DISTRICT	VARCHAR2(20)
POPULATION	NUMBER

COUNTRY

Field	Type
CODE	VARCHAR2(3)
NAME	VARCHAR2(44)
CONTINENT	VARCHAR2(13)
REGION	VARCHAR2(25)
SURFACEAREA	NUMBER
INDEPYEAR	VARCHAR2(5)
POPULATION	NUMBER
LIFEEXPECTANCY	VARCHAR2(4)
GNP	NUMBER
GNPOLD	VARCHAR2(9)
LOCALNAME	VARCHAR2(44)
GOVERNMENTFORM	VARCHAR2(44)
HEADOFSTATE	VARCHAR2(32)
CAPITAL	VARCHAR2(4)
CODE2	VARCHAR2(2)

MySQL

```
1  SELECT CITY.Name FROM CITY INNER JOIN COUNTRY ON
   CITY.CountryCode = Country.Code WHERE COUNTRY.Continent =
   'Africa';
```

Line: 1 Col: 117

Upload Code as File

Run Code | Submit Code

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
1
```

Expected Output Download

```
1  Qina
2  Warraq al-Arab
3  Kempton Park
4  Alberton
5  Klerksdorp
```

1	0	9
2	10	19
3	20	29
4	30	39
5	40	49
6	50	59
7	60	69
8	70	79
9	80	89
10	90	100

Ketty gives Eve a task to generate a report containing three columns: Name, Grade and Mark. Ketty doesn't want the NAMES of those students who received a grade lower than 8. The report must be in descending order by grade -- i.e. higher grades are entered first. If there is more than one student with the same grade (8-10) assigned to them, order those particular students by their name alphabetically. Finally, if the grade is lower than 8, use "NULL" as their name and list them by their grades in descending order. If there is more than one student with the same grade (1-7) assigned to them, order those particular students by their marks in ascending order.

Write a query to help Eve.

Sample Input

ID	Name	Marks
1	Julia	88
2	Samantha	68
3	Maria	99
4	Scarlet	78
5	Ashley	63
6	Jane	81

Sample Output

```
Maria 10 99
Jane 9 81
Julia 9 88
Scarlet 8 78
```

DB2

```
/*
    Enter your query here and follow these instructions:
    1. Please append a semicolon ";" at the end of the query and enter your query in a single line to avoid error.
    2. The AS keyword causes errors, so follow this convention: "Select t.Field From table1 t" instead of "select t.Field From table1 AS t"
    3. Type your code immediately after comment. Don't leave any blank line.
*/
SELECT CASE WHEN GRADE < 8 THEN 'NULL' ELSE NAME END, GRADE, MARKS FROM STUDENTS JOIN GRADES ON MARKS BETWEEN MIN_MARK AND MAX_MARK ORDER BY GRADE DESC, CASE WHEN GRADE >= 8 THEN NAME ELSE NULL END ASC, CASE WHEN GRADE < 8 THEN MARKS ELSE NULL END ASC;
```

Line: 8 Col: 253

Upload Code as File

Run Code | Submit Code

You have earned 20.00 points!

You are now 20 points away from the 3rd star for your sql badge.

84% 280/300

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
INPUT
```

Expected Output Download

```
Britney 10 95
Heraldo 10 94
Julia 10 96
Kristeen 10 100
Stuart 10 99
Amina 9 89
```

Julia just finished conducting a coding contest, and she needs your help assembling the leaderboard! Write a query to print the respective hacker_id and name of hackers who achieved full scores for more than one challenge. Order your output in descending order by the total number of challenges in which the hacker earned a full score. If more than one hacker received full scores in same number of challenges, then sort them by ascending hacker_id.

Input Format

The following tables contain contest data:

- Hackers: The hacker_id is the id of the hacker, and name is the name of the hacker.

Column	Type
hacker_id	Integer
name	String

- Difficulty: The difficult_level is the level of difficulty of the challenge, and score is the maximum score that can be achieved for a challenge at that difficulty level.

Column	Type
difficulty_level	Integer
score	Integer

- Challenges: The challenge_id is the id of the challenge, the hacker_id is the id of the hacker who created the challenge, and difficulty_level is the level of difficulty of the challenge.

Column	Type
challenge_id	Integer
hacker_id	Integer
difficulty_level	Integer

- Submissions: The submission_id is the id of the submission, hacker_id is the id of the hacker who made the submission,

MySQL

```
/*
Enter your query here.
*/
SELECT s.hacker_id, h.name FROM Submissions s JOIN Challenges c ON s.challenge_id = c.challenge_id JOIN Difficulty d ON c.difficulty_level = d.difficulty_level JOIN Hackers h ON s.hacker_id = h.hacker_id WHERE s.score = d.score GROUP BY s.hacker_id, h.name HAVING COUNT(DISTINCT s.challenge_id) > 1 ORDER BY COUNT(DISTINCT s.challenge_id) DESC, s.hacker_id ASC;

```

Line: 5 Col: 1

Upload Code as File

Run Code | Submit Code

You have earned 30.00 points!

You are now 140 points away from the 4th star for your sql badge.

7% 310/450

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
INPUT
```

Expected Output Download

```
27232 Phillip
28614 Willie
15719 Christina
43892 Roy
14246 David
14372 Michelle
```

Harry Potter and his friends are at Ollivander's with Ron, finally replacing Charlie's old broken wand.

Hermione decides the best way to choose is by determining the minimum number of gold galleons needed to buy each non-evil wand of high power and age. Write a query to print the id, age, coins_needed, and power of the wands that Ron's interested in, sorted in order of descending power. If more than one wand has same power, sort the result in order of descending age.

Input Format

The following tables contain data on the wands in Ollivander's inventory:

- Wands: The id is the id of the wand, code is the code of the wand, coins_needed is the total number of gold galleons needed to buy the wand, and power denotes the quality of the wand (the higher the power, the better the wand is).

Column	Type
id	Integer
code	Integer
coins_needed	Integer
power	Integer

- Wands_Property: The code is the code of the wand, age is the age of the wand, and is_evil denotes whether the wand is good for the dark arts. If the value of is_evil is 0, it means that the wand is not evil. The mapping between code and age is one-one, meaning that if there are two pairs, $(code_1, age_1)$ and $(code_2, age_2)$, then $code_1 \neq code_2$ and $age_1 \neq age_2$.

Column	Type
code	Integer
age	Integer
is_evil	Integer

Sample Input

Wands Table:

MySQL

```
/*
Enter your query here.
*/
SELECT W.id, P.age, W.coins_needed, W.power FROM Wands W JOIN Wands_Property P ON W.code = P.code WHERE P.is_evil = 0 AND W.coins_needed = (SELECT MIN(W2.coins_needed) FROM Wands W2 JOIN Wands_Property P2 ON W2.code = P2.code WHERE P2.is_evil = 0 AND P2.age = P.age AND W2.power = W.power) ORDER BY W.power DESC, P.age DESC;
```

Line: 4 Col: 322

Upload Code as File

Run Code | Submit Code

You have earned 30.00 points!

You are now 110 points away from the 4th star for your sql badge.

27% 340/450

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
INPUT
```

Expected Output Download

```
1038 496 4789 10
1130 494 9439 10
1315 492 4126 10
9 491 7345 10
858 483 4352 10
1164 481 9831 10
```

You did such a great job helping Julia with her last coding contest challenge that she wants you to work on this one, too!

The total score of a hacker is the sum of their maximum scores for all of the challenges. Write a query to print the hacker_id, name, and total score of the hackers ordered by the descending score. If more than one hacker achieved the same total score, then sort the result by ascending hacker_id. Exclude all hackers with a total score of **0** from your result.

Input Format

The following tables contain contest data:

- Hackers: The hacker_id is the id of the hacker, and name is the name of the hacker.

Column	Type
hacker_id	Integer
name	String

- Submissions: The submission_id is the id of the submission, hacker_id is the id of the hacker who made the submission, challenge_id is the id of the challenge for which the submission belongs to, and score is the score of the submission.

Column	Type
submission_id	Integer
hacker_id	Integer
challenge_id	Integer
score	Integer

Sample Input

Hackers Table:

hacker_id	name
4071	Rose
4806	Angela

MySQL

```
/*
Enter your query here.
*/
SELECT h.hacker_id, h.name, SUM(ms.max_score) FROM Hackers h
JOIN (SELECT hacker_id, challenge_id, MAX(score) AS max_score
FROM Submissions GROUP BY hacker_id, challenge_id) AS ms ON
h.hacker_id = ms.hacker_id GROUP BY h.hacker_id, h.name
HAVING SUM(ms.max_score) > 0 ORDER BY SUM(ms.max_score) DESC,
h.hacker_id ASC;

```

Line: 4 Col: 269

Upload Code as File

Run Code | Submit Code

You have earned 30.00 points!

You are now 80 points away from the 4th star for your sql badge.

47% 370/450

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Success

Input (stdin) Download

```
INPUT
```

Expected Output Download

```
76971 Ashley 760
84200 Susan 710
76615 Ryan 700
82382 Sara 640
79034 Marilyn 580
78552 Harry 570
```